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09/920,728	08/03/2001	Robert James Tribe	0100/0131	5066

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EXAMINER

RODRIGUEZ, CRIS LOIREN

ART UNIT	PAPER NUMBER
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3763

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/920,728
Filing Date: August 03, 2001
Appellant(s): TRIBE ET AL.

Louis Woo
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 4, 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1, 5, and 7, and claims 4, and 8 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,362,591

MOBERG

3-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 5, 7, 9, and 10 are rejected under 35 U.S.C. 102(e), and claims 4, and 8 are rejected under 35 U.S.C. 103(a). This rejection is set forth in a prior Office Action, mailed on August 16, 2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 7, 9, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Moberg et al (US 6,362,591).

Moberg discloses a syringe pump having a drive mechanism 120, an occlusion detector including a force sensor 7' (see US 4,678,408 incorporated by reference in col. 4, lines 27-30), and the method steps as claimed. Moberg's syringe pump is operable in response to a detected occlusion to reverse the drive applied to move the plunger along the barrel sufficiently until the force detected by the force sensor falls by a predetermined amount. Please note that the examiner's interpretation for force and pressure are about the same; according to the dictionary "pressure" means: a force that compels. See attachment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moberg et al.

Moberg discloses the invention substantially as claimed. Moberg discloses that upon occlusion detection by the sensor, the pump rewinds by some predetermined amount following an occlusion alarm (incremental drive system rewind). However, Moberg fails to specifically disclose the pump being arranged to reverse the drive until force detected by the force sensor is substantially 10% of the force at which an occlusion is detected, and the force applied to drive the plunger is changed to reduce the detected force to substantially 10% of the predetermined value. This predetermined value is deemed matter of design choice, well within the skill of the ordinary artisan, obtained through routine experimentation in determining optimum results.

(11) Response to Argument

Applicant's arguments filed November 4, 2004, and April 27, 2004 have been fully considered but they are not persuasive.

In response to applicant's arguments that Moberg's pump also reverses the drive when the occlusion is detected but its not in response to the detection of an elevated force, the examiner disagrees. The examiner directs applicant attention to col. 5, lines 33- 65, and col. 6, lines 7-17. The occlusion detector (force sensor) does not work by itself, and works in conjunction with a combination of hardware and software such as a

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control unit or encoder and a motor similar to applicants (col. 5 lines 32-49) when there is a problem with the pump mechanism. More specifically, Moberg's first embodiment describes the force sensor as measuring the pump motor current consumption based upon non-occlusion state versus an occlusion state. A measurement of the pump current is compared before and during an occlusion, and an alarm signals the occlusion. Thus, the combination of hardware and software disclosed inherently acts as a force sensor as it senses an undesired force in the pump mechanism. Moreover, Nason '408 describes a detector 7' for there is a problem with the pump mechanism such as the plunger that could be included in Moberg's pump. Moberg also discloses that the occlusion detector measures variation in reservoir pressure by monitoring several parameters (col. 5). Therefore, Moberg anticipates the claims.

Also, because Moberg's sensor and applicant's have different names (high pressure sensor and force sensor) does not mean that one acts differently from the other. However, the internal structures are different from each other, but those differences are not being set forth in the claims. In other words, applicant has not distinguished its sensor structurally from Moberg.

Furthermore, the incorporation by reference of the '408 Nason patent into Moberg is to show the construction of the infusion pump (which includes a detector 7' for when there is a problem with the pump mechanism such as the plunger) and its operation which can be incorporated in Moberg's pump. In response to arguments that Moberg, in col. 1, line 58 – col. 2, line 28, avoids force sensing, the examiner disagrees. That's a description of prior infusion pumps using switch systems, and not a description


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of its own invention. Furthermore, with respect to applicant's arguments that the objective of Moberg is to eliminate the use of any force sensor, this is traversed because Moberg's intention is to improve the function of the pressure sensor by using its electric outcome for detecting occlusion in the pump.

In response to applicant's arguments with respect to claims 4 and 8, the examiner directs Appellant to the rejection set forth above.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

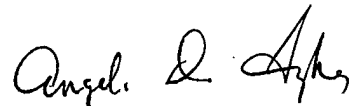

Cris L. Rodriguez
Examiner
Art Unit 3763

Cris L. Rodriguez
January 13, 2005

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